

OPERATING EXPERIENCE SUMMARY



Office of Nuclear and Facility Safety

February 1 – February 14, 2000

Summary 2000-03

The Office of Environment, Safety and Health publishes the Operating Experience Summary to promote safety throughout the Department of Energy (DOE) complex by encouraging feedback of operating experience and encouraging the exchange of information among DOE nuclear facilities.

The Summary should be processed as an external source of lessons-learned information as described in DOE-STD-7501-95, change notice 1, September 1997, *Development of DOE Lessons Learned Programs*.

To issue the Summary in a timely manner, the Office of Environment, Safety and Health (EH) relies on preliminary information such as daily operations reports, notification reports, and, time permitting, conversations with cognizant facility or DOE field office staff. If you have additional pertinent information or identify inaccurate statements in the summary, please bring this to the attention of Jim Snell, 301-903-4094, or Internet address jim.snell@eh.doe.gov, so we may issue a correction.

Readers are cautioned that review of the Summary should not be a substitute for a thorough review of the interim and final occurrence reports.

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Table of Contents

EVENTS.....	1
1. TRACKHOE BUCKET DAMAGED WHILE HAMMERING A CONCRETE PIER.....	1
2. WORKER SUSTAINS SEVERE HEAD INJURY OPENING JAMMED DUMPSTER DOORS	3
3. LEAD PROCESSING OPERATIONS VIOLATE OSHA STANDARDS.....	5
4. FREEZE PROTECTION PROBLEMS CAUSE DAMAGE AND LOSS OF FIRE PROTECTION	6
5. OVERHEAD CRANE PENDANT CONTROL RECALL	9



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EVENTS

1. TRACKHOE BUCKET DAMAGED WHILE HAMMERING A CONCRETE PIER

On February 1, 2000, at the Ashtabula Environmental Management Project Site, a contractor trackhoe operator was nearly struck by a broken bucket extension when he attempted to break-up a reinforced concrete pier using the trackhoe bucket. The projectile smashed the trackhoe window and scattered broken glass throughout the cab interior, damaging a foot pedal controller. Facility management instructed the operator to stop work immediately and shut down his equipment. The trackhoe operator removed the broken glass from the trackhoe after safety personnel responded to the area and reviewed the incident. Facility management instructed the contractor to complete the job with a portable concrete saw and a jackhammer. There were no injuries associated with this event. Improper use of equipment can lead to serious injury. (ORPS Report OH-AB-RMI-RMIDP-2000-0002)

The extrusion plant houses press pits which were used to manufacture uranium billets. Facility management wanted to create additional floor space in the plant by backfilling the press pits with concrete to level the floor. Investigators determined that the technical specification and work request written for the backfilling procedure did not include steps for hammering concrete obstructions with a trackhoe bucket. Refer to Figure 1-1 for an overall view of the trackhoe and bucket. They determined that the trackhoe manufacturer designed the bucket teeth extensions according to industrial equipment standards and did not intend the bucket to be used as a substitute for a jackhammer. Refer to Figure 1-2 for details of the damage and the remaining tooth extensions. Investigators determined that the operator discovered the concrete pier obstruction after he started the job and did not follow procedure when he used the fully extended trackhoe arm and bucket to demolish the pier. Investigators also determined that site procedure dictates the use of a jackhammer or concrete saw to complete this type of job.



Figure 1-1. Trackhoe used to backfill press pits



Figure 1-2. Close-up of bucket with tooth extension

This event underscores the importance of an integrated approach to safety that emphasizes individual and management accountability and ownership, implementation of requirements and procedures, and thorough and systematic management oversight. The responsibility to ensure adequate planning and control of work activities resides with line management. Managers should ensure that work control processes are followed and facility practices are enforced.

Personnel at DOE facilities should have a continually questioning attitude toward safety issues. Each individual is ultimately responsible for complying with rules to ensure personal safety. Facility managers should communicate the idea that safety is of prime importance and all personnel must be committed to excellence and professionalism. Instructions to workers should emphasize changes in work methods or equipment, or any other deviation from an approved work plan, can introduce unforeseen hazards. Changes to approved work methods, equipment, and plans must receive the same hazard analysis, review, and approval as the original work plan. Any change should entail a work stoppage combined with a thorough review of the potential hazards associated with the change.

Personnel at DOE facilities are required to follow established work control plans without exception. Facility managers, work planners, and subcontractor supervisors should review the following references, which provide guidance and good practices for implementing work control plans.

- DOE O 4330.4B, *Maintenance Management Program*, section 6.2, states that deficient procedures and failure to follow procedures are major contributors to many significant and undesirable events. Section 7 provides guidance for planning, scheduling, and coordinating work activities. Section 8.3.6 states that non-facility contractor and subcontractor personnel should be trained and qualified for the work they are to perform. It also states that subcontractor personnel should perform work to the same high standards expected of facility personnel and that subcontractor managers should be held accountable for the work performance of their personnel.

- DOE-STD-1053-93, *Guideline to Good Practices for Control of Maintenance Activities at DOE Nuclear Facilities*, provides extensive guidance for the development of work control plans and the supervision of maintenance activities.

KEYWORDS: trackhoe, improper procedure

FUNCTIONAL AREAS: Industrial Safety, Work Planning

2. FOLLOW UP ON WORKER WHO SUSTAINED HEAD INJURY OPENING JAMMED DUMPSTER DOORS

OE Summary 99-46 reported an event at the Monticello Mill Site, where on November 1, 1999, a subcontractor worker received severe head injuries while trying to open jammed doors of a belly dump truck. He was airlifted to a hospital in Grand Junction, Colorado, for medical treatment (ORPS Report ALO--MCTC-GJPOTAR-1999-0004). The Albuquerque Operations Manager established a Type B Accident Investigation Board to determine the causes of the event and recommend actions to avoid recurrences. The important features of this Investigation Report are as follows.

The report states that the driver of a belly dump truck was attempting to pry open jammed doors with an iron bar to unload stone rip-rap. The doors of the belly dump opened unexpectedly, emptying out the rock contents. The weight of the rocks pushed the iron bar upward, striking the worker and causing a severe skull fracture above his right eye. The driver was transported to a hospital in Grand Junction, Colorado, where he underwent surgery. He is expected to make a full recovery.

In 1999, the construction company at the Site was awarded two contracts; one to produce and deliver sand and rock and the other to recontour areas around the Mill Site. The company hired additional trucks and drivers from a local company to haul the stone in

order to maintain their production schedule for both contracts. The accident took place during delivery of stone to the stockpile area of the Mill Site.

The local company hired the driver and provided him a belly dump truck that had not been used for a year. The driver noticed that the opening mechanism of the doors was not functioning, and he had to pry open the doors with an iron bar to empty the stone rip-rap. The driver was successful in unloading the stones in the first two trips on the day of the incident. The incident occurred on the third trip.

The Board's investigators determined the following causal factors.

- Site workers and subcontractors were not following site procedures and contract requirements.
- Project and construction management failed to clearly define roles and responsibilities for safety and health oversight.

The investigation also identified the following contributing causes that collectively increased the likelihood of the accident.

- Construction contract management did not ensure subcontractors were meeting contractual requirements.
- Occurrence investigations were not thorough enough to recommend effective actions to prevent similar occurrences.
- Analysis of various construction tasks was insufficient to identify all job hazards.
- Project and construction management imposed less rigorous safety and health requirements on vendors than construction contractors.

Applying barrier analysis technique to the accident conditions, the investigators identified the physical and administrative barriers that would have isolated the driver from the hazards of the jammed doors and prevented the accident. The following is the summary of the Barrier Analysis.

- The use of the metal bar for prying open jammed doors did not provide a safe separation between the driver and the doors. The proper procedure would have been to stop work and have the door opening mechanism repaired.
- Neither the construction subcontractor nor the truck owner provided instructions to the driver about the requirements for PPE, stop-work procedures and reporting of equipment malfunctions.
- The belly dump truck had been idle for a year and did not undergo proper safety inspections before being placed in service. A proper check for operational readiness would have prevented use of the truck and averted this accident.
- Project and safety managers did not clearly understand roles and responsibilities and did not adequately communicate safety procedures to workers. Had the project management mandated safety training for all subcontractor and vendor workers, the potential for accidents would have been considerably reduced.
- Vendors generally did not receive adequate briefings about their roles and responsibilities for site safety. This adversely impacted the judgement of the driver, who was unfamiliar with his safety responsibilities and continued driving the belly dump truck without getting the defective doors opening system repaired.

The investigators determined that (1) the field supervisors did not adequately monitor work activities at the site, nor ensure timely equipment maintenance and repairs, (2) the site managers did not review and update operators' qualifications and training, (3) shift turnovers and changes did not appropriately balance operating skills to ensure personnel safety, and (4) there was lack of adequate oversight and tracking of corrective actions.

The Type B Investigation also noted that four incidents involving scrapers took place at the site between June 1 and September 8, 1999. No personnel were injured or equipment

damaged in these events. The root and contributing causes were operator error, lack of management's awareness of road conditions and equipment failures. Lack of thorough root cause analysis and subsequent lessons learned implementation resulted in inadequate safety training of workers at the site.

The complete report of the Type B Accident Investigation Board can be accessed on the web at the address http://tis.eh.doe.gov/oversight/acc_inv/acc_investigations2.html.

EH has reported a number of similar incidents in ORPS data system. The following is an example.

- On July 8, 1998 at the at the Mill Site, a Uranium Mill Tailing haul truck tipped over on its side. No one was hurt and minimum equipment damage resulted, but there was a great possibility for worker injury. The direct cause of the accident was personnel error and the root cause was a management problem; inadequate administrative control. (ORPS Report ALO--MCTC-GJPOTAR-1998-0007)

KEYWORDS: head injury, communication, Type B Investigation, barrier analysis, safety training

FUNCTIONAL AREAS: Construction Safety, Personnel Protection

3. LEAD PROCESSING OPERATIONS VIOLATE OSHA STANDARDS

On January 28, 2000, at the Brookhaven National Laboratory, two Department of Energy safety assessors identified several safety issues when they reviewed a lead smelting operation. The Brookhaven Safety and Health Services Division manager investigated and issued a stop work order in accordance with Brookhaven procedure. Lead smelting operations will remain shut down until a detailed review is completed. There were no injuries associated with this event. Lead processing Operations can pose a health hazard if safety precautions are not taken. (ORPS Report CH-BH-BNL-BNL-2000-0003)

The Commercial Radiation Therapy Facility at Stony Brook, New York uses a lead smelting process to construct masks for radiation treatment of cancerous tumors in humans. Investigators determined that the lead-smelting operator was not as familiar with procedures regarding process safety as they should have been for the tasks that they were performing. Investigators found evidence of noncompliances in the process area including,

- visible lead contamination on horizontal and vertical room surfaces
- an inoperable fume hood that contained the lead smelter
- contaminated personal protective equipment
- contaminated process debris being disposed as normal waste
- lack of routine surface contamination monitoring and personal exposure monitoring
- inadequate operator training
- lack of a developed written lead compliance program

Investigators also determined that the operator followed University of New York procedures for occupational safety instead of those of the of Occupational Safety and

Health Administration. The Brookhaven Group Appraiser of Lead Safety held a critique and developed the following corrective actions.

- floor mats will be placed so that lead will not be tracked into the hall
- periodic laboratory surface swipes will be performed
- training will be administered on the selection, use and disposal of personal protective equipment

EH engineers identified the following similar events.

- Weekly Summary 98-14 reported that on April 2, 1998, at the Savannah River Technology Center, facility managers determined that elements of the lead compliance program did not provide adequate guidance to protect workers. The site lead compliance program stated that workers could move ten lead bricks during pre-defined tasks without additional lead-specific administrative and engineering controls, but it did not specify what constituted a pre-defined task. Program administrative and engineering controls included training, wearing respirators, and monitoring worker blood lead levels. Based on program deficiencies identified by facility managers, the Center operations manager curtailed all lead handling performed at the Center without facility industrial hygienist approval. (ORPS Report SR--WSRC-LTA-1998-0012)
- Weekly Summary 99-33 reported that on August 11, 1999, at the Savannah River Technology Center, industrial hygienists reviewing sampling data for lead work activities determined that on May 7, 1998, an employee may have been exposed to lead above the OSHA permissible exposure limit. At that time, industrial hygienists had rejected one sample point as statistically invalid because it was significantly higher than any other point in a sampling program. However, the hygienists conducting the current review concluded that the rationale for rejecting the sample point did not provide conclusive justification. They recalculated the exposure with the questionable sample point included and determined, based on a 10-hour work shift, that the employee could have been exposed to 43 $\mu\text{g}/\text{m}^3$. The corresponding permissible exposure limit is 40 $\mu\text{g}/\text{m}^3$ averaged over 10 hours. (ORPS Report SR--WSRC-LTA-1999-0029)
- Weekly Summary 99-01 reported that on December 21, 1998, at the Hanford Site Pacific Northwest National Laboratory, a scientist was exposed to airborne lead particulate that exceeded the OSHA permissible exposure levels (PELs) while he cut epoxy-mounted lead- and lead-oxide-containing plates with a water-cooled tile saw. The scientist's 8-hour time-weighted average exposure was 138 $\mu\text{g}/\text{m}^3$, which exceeds the OSHA 8-hour permissible exposure level of 50 $\mu\text{g}/\text{m}^3$. Investigators determined that the scientist also cut lead plates twice between December 14 and 18 using the water-cooled tile saw, but that no one performed lead monitoring during that time. (ORPS Report RL--PNNL-PNNLBOPER-1998-0023)

KEYWORDS: OSHA, safety violations, lead

FUNCTIONAL AREAS: Industrial Safety, Materials Handling/Storage, Work Planning

4. FREEZE PROTECTION PROBLEMS CAUSE DAMAGE AND LOSS OF FIRE PROTECTION

Two occurrences were reviewed involving freeze protection. On January 29, 2000, at Oak Ridge Y-12, a process water line ruptured from lack of freeze protection and leaked approximately 78,000 gallons of process water into the basement of a building. The rising water caused two tanks to float and damage the ceiling. Plant personnel secured process water and electrical power. Approximately 26,000 gallons leaked into the surrounding soil and adjacent buildings. The water was not radioactive and did not spread any contamination. In a similar event on February 5, 2000 at Idaho Radioactive Waste complex a fire protection system valve broke due to freezing. The fire department isolated the break, took the leaking portion out of service, and instituted a fire watch of the affected areas. Lack of adequate freeze protection can cause piping containing liquids to freeze and subsequently leak. (ORPS Reports ORO--LMES-Y12NUCLEAR-2000-0002 and ID--BWI-RWMC-2000-0003)

Investigators for the Oak Ridge event determined that the shift supervisor discovered that freezing temperatures had caused a process water line to break and spill process liquid into an unheated basement room. Investigators determined that the temperatures were below freezing and the heating unit in the room was malfunctioning. They also determined that the process water piping ran underground and penetrated the room in a stairwell near the entrance door. The piping did not have any heat tracing or insulation. Investigators also determined that the room had no insulation on the walls or in the roof.

The rising water caused two 4,000-gallon tanks, which were not secured, to float to the ceiling and lift the ceiling approximately 18 inches. The roof is a composite of sheet metal with a tar and chip covering and needs to be partially replaced. Investigators discovered that the tanks contained a small amount of aluminum nitrate with a pH of one. Environmental management and operations sampled the spilled water and determined that the spill did not constitute a release hazard. The water was pumped from the room to a dike-protected area to provide access to the damaged area.

Investigators determined that a similar incident involving this same process line freezing and rupturing occurred about three years ago with less serious consequences. The investigation also revealed that lessons learned and corrective actions from this previous event had not been effective and contributed to the seriousness of this event.

Investigators for the Idaho event determined that a line valve had frozen and failed. A fire water flow alarm was received when a thaw occurred and firewater flowed out of the broken valve. The fire department determined that a drain line froze causing the valve to break and water to flow out the open break. An hourly fire watch was initiated and repairs and corrective actions are being implemented.

EH has reported on several freeze-related events in previous Summaries. These events emphasize the importance of timely corrective actions.

Following are examples of some freeze protection reported during the winter months.

- [Weekly Summary 99-04](#) reported that on January 5, 1999, at the Federal Energy Technology Center, a discharge of a foam fire suppression system

occurred because of a frozen water actuation line. The actuation line (pressurized pilot line) controls the operation of a main water supply line to the foam system. Extreme weather (approximately 5 degrees Fahrenheit) caused the line to freeze. When the line thawed, the resulting leaks reduced the pilot water pressure until an actuation valve opened, causing the foam suppression system to discharge. (ORPS Report HQ--GOPE-FETC-1999-0001)

- Rocky Flats Environmental Technology Site facility managers reported to ORPS that a fire sprinkler system froze and ruptured, spilling water the facility. (ORPS Report RFO--KHLL-NONPUOPS2-1998-0002) Burst pipes, frozen water lines, and cracked sprinkler heads in fire protection systems are frequently reported problems during cold weather.

Facility managers should review the following guidance and ensure that freeze protection actions are effectively implemented.

Facility managers should determine how long buildings could be without power. They should also develop specific contingency plans for connecting temporary power sources, including (1) what size generator is required; (2) where and how to connect power; (3) where to locate and ground a generator; and (4) how to introduce and route generator power cables into buildings. These contingency plans should be detailed and readily available to the personnel installing temporary power; otherwise, workers could introduce additional hazards into the work environment.

Several steps can be taken to establish freeze protection for facility systems equipment. These steps, together with contingency plans for severe cold should be incorporated into written procedures and periodically reviewed for adequacy. The following list identifies some typical inspections that should be performed before the cold weather season begins. Facility personnel should take the following steps to ensure freeze protection problems are minimized.

- Verify that facility cold weather checklists are available for exposed instrumentation and piping.
- Verify that facility personnel periodically calibrate and test instrumentation associated with heat tracing, space heaters, and thermostats.
- Verify that facility personnel inspect systems that have been subjected to maintenance during the past year or during the current cold weather season to determine if cold weather protective measures have been reestablished.
- Verify that facility personnel have provided adequate cold weather protection for periods of prolonged shutdowns and in areas that are not kept warm by normal operations.
- Verify that deficiencies previously identified have been corrected and that modifications to correct or freeze protection capabilities are appropriately prioritized and scheduled before the beginning of the cold weather season.

Facility managers should review their systems and equipment maintenance histories, policies, procedures, and work planning processes and should walk down systems to identify potential cold weather problems.

DOE O 4330.4B, *Maintenance Management Program*, chapter II, section 19, "Seasonal Facility Preservation Requirements," program to prevent equipment and building damage due to cold weather. The Order states that the program should include a freeze protection plan, including details on inspections, preventive maintenance, and corrective maintenance to ensure continued safe facility operations. Section 16, requires a maintenance history and trending program. Maintenance planners, coordinators, supervisors, and craft personnel should use maintenance history on a routine basis to identify previous maintenance work and its results.

DOE-STD-1064-94, *Guideline to Good Practices for Facility Preservation at DOE Nuclear Facilities*, provides guidance to assist facility maintenance organizations in the review of existing methods (and the development of new methods) for establishing a seasonal maintenance program. Section 3.4.1 of the guide includes cold weather preparation information; Appendix A provides an example of a cold weather checklist. This standard also contains guidance for tornadoes, cold weather, flash floods, and other natural disasters.

DOE/EH-0213, *Cold Weather Protection*, October 1991, Office of Environment, Safety and Health, Bulletin 91-4, provides insight, actions, and recommendations applicable to sites susceptible to cold weather. This bulletin can be found at URL <http://tis.eh.doe.gov/docs/bull/links.html>.

Many freeze protection failures are preceded by indicators or lessons learned from previous occurrences. Facility managers may also want to review the following guidelines on lessons learned and corrective actions.

DOE-STD-1004-92, *Root Cause Analysis Guidance Document*, chapter 6, "Corrective Actions," states that proposed corrective actions should be (1) reviewed to ensure the appropriate criteria are met, (2) prioritized based on importance, (3) scheduled, (4) entered into a commitment tracking system, and (5) implemented in a timely manner. It states that a complete corrective action program should be based on specific causes of the occurrence, lessons learned from other facilities, appraisals, and employee suggestions. It states that corrective actions should be tracked to ensure they have been properly implemented and are functioning as intended. It also states that the recurrence of the same similar events must be identified and analyzed and, if the same or similar event recurs, the original occurrence should be investigated to determine why corrective actions were not effective.

DOE-STD-1010-92, *Guide to Good Practices for Incorporating Operating Experiences*, and DOE-STD-7501-95, *Development of DOE Lessons Learned Programs*, provide guidance on a systematic approach for incorporating operating experiences. They describe an approach for implementing the following elements into lessons-learned programs.

- Selecting and analyzing events for facility operation.
- Ensuring that event reports and subsequent analysis are distributed to appropriate organizations.

- Incorporating report information into new or existing programs and training.
- Tracking action plans to ensure that corrective actions are completed.

KEYWORDS: freeze protection, maintenance

FUNCTIONAL AREAS: Operating Experience, Lessons Learned

5. OVERHEAD CRANE PENDANT CONTROL RECALL

On February 1, 2000, at Savannah River, an 85/30-ton crane was found to contain pendant codes which have been recalled by the manufacturer. The Square D Company has issued a recall notice related to potential failure of push buttons installed on pendant codes. The notice concerns overhead cranes equipped with control pendants that have Square D Class 9001, type SKU2, SKU3, SKU4 or SKU5 multi-speed operators (pushbuttons manufactured between January 1999 and October 1999. These operators may remain energized when pressure to the button is released. This may result in continued operation leading to possible personnel injury or equipment damage. This safety recall notice follows this paragraph. (ORPS Report SR--WSRC-REACL-2000-0002, and SR--WSRC-CSWE-2000-0002)

You may contact the Square D Company at (828) 255-1383 for replacement parts.

KEYWORDS: Crane, controls, safety recall

FUNCTIONAL AREAS: Hoisting and Rigging



SQUARE D COMPANY
Schneider Electric

8001 Highway 64E, Knightdale, NC 27545
919 266-3671 • FAX 919 217-6625

October 28, 1999

To: Square D Customers and Users of Class 9001 Type SKRU_ Multi-Speed Push Button Operators

From: Neil W. Tollas - Director, Logic Control Products

SUBJECT: SKRU Multi-Speed Push Button Operators
Manufactured between January 1999 and August 1999

PRODUCT SAFETY NOTICE **Warning of Potential Unsafe Condition**

DELIVER IMMEDIATELY TO RESPONSIBLE PERSON IN YOUR ORGANIZATION

Square D has become aware from a field report that the Class 9001 Type SKRU2, 3, 4, or 5 multi-speed operators may randomly maintain their actuated state when pressure to the button is released. A small percentage of the units produced between January 1999 and September 1999, may exhibit this condition.

Depending on the application, an operator remaining in its actuated state can result in unintended machine operation, leading to a potential for serious personal injury or property damage.

The potential problem has been corrected in production beginning the 1st of October.

Recommended Action -

Uninstalled Product(s):

- 1.** Determine the date of manufacturing for your Class 9001 Type SKRU2, 3, 4, or 5 product by checking the date code located on the carton. (See Attachment A, PRODUCT IDENTIFICATION INSTRUCTIONS) Date codes of 9901, 9902, 9903, through 9940 must be returned.
- 2.** If you identify products with these date codes, make arrangements for immediate replacement of the operators by ordering a new device from your local Square D Distributor. You will obtain full credit for the replacement operators by returning the old device to you local distributor. Your distributor will return these devices to Square D Company.

Installed Product(s):

Note: Class 9001 Type SKRU2, 3, 4, or 5 multi-speed operators are most often mounted in Class 9001 SKYP Pendant Stations, but may be used in other pendant or enclosure applications.

Determine the date of manufacturing for your Class 9001 Type SKRU2, 3, 4, or 5 product by checking the date code located on the product. (See attachment A, PRODUCT IDENTIFICATION INSTRUCTIONS)

If you identify products with date codes of 9901, 9902, 9903, through 9940, make arrangements for immediate replacement of the operators. Please complete the attached CUSTOMER INFORMATION FORM (Attachment B). List the Type Number and Quantity of products identified. Fax the completed form to (828) 255-1576 or mail it direct to:

Square D Company
Attn: Bill Crum
128 Bingham Road
Asheville, NC 28806

You will receive replacement operators from Square D at no charge. You must return you old operators to Square D Asheville (at the above address) within 90 days to avoid being invoiced for the replacement operators.

Questions regarding return and replacement of subject products should be directed to Bill Crum (828) 255-1383 Direct Line, (828) 255-1576 Fax.

This notice is applicable to Class 9001 Type SKRU2, 3, 4, or 5 multi-speed push button operators with date code between 9901 and 9940 as described in the Attachment A – PRODUCT IDENTIFICATION INSTRUCTIONS.

Products which are not of the Class, Type, and date codes as described in attachment A are not subject to this notice.

We regret any inconvenience this may cause.

Sincerely,



Neil W. Tollas
Director, Logic Control Products

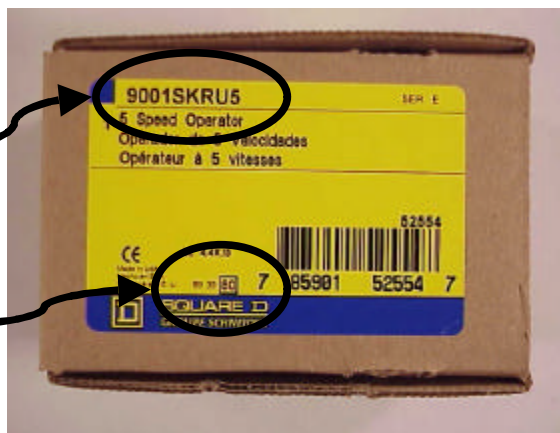
Enclosures: Attachment A PRODUCT IDENTIFICATION INSTRUCTIONS
Attachment B CUSTOMER INFORMATION FORM

PRODUCT IDENTIFICATION INSTRUCTIONS

(Attachment A)

Uninstalled Products

- 1) Check Product Carton for Class 9001 Type SKRU2, SKRU3, SKRU4, or SKRU5. All other types are not affected by this notice.
- 2) Date Codes 9901, 9902, 9903, etc.... through 9935 should be returned. The date code is located to the left of the box with 80 in it, as shown.



Product Carton Label

Installed Products

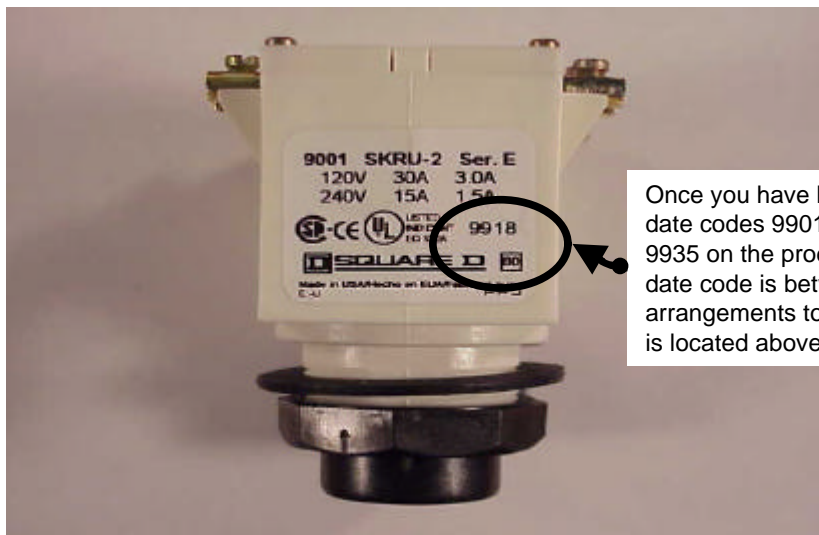
WARNING Hazard of Electrical Shock or Burn.

Turn off power supplying the pendant station or control station before opening the device to inspect the date code.

Typically, devices will be found mounted in SKYP Pendant Stations, or other types of control stations. To inspect the SKRU device, you will need to open the pendant or panel to access the product nameplate on the end of the device.



SKRU__ Multispeed Operator



Once you have located the device, check for date codes 9901, 9902, 9903, etc.... through 9935 on the product nameplate as shown. If the date code is between 9901 - 9935, make arrangements to replace the device. Date code is located above the box with 80 in it, as shown.

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